CLAIMS

1. An arrangement for feeding an anode into a metallurgical smelting reactor (2), such as a flash converter, said arrangement including a feeding funnel (7) made of at least one part for feeding at least one anode (4) at a time into the smelting reactor, said arrangement also including a bending element (5) for bending the anode, **characterized** in that the essentially completely bent anode (4) is arranged to meet the surface of the melt (8) contained in the smelting reactor in an essentially horizontal position.

2. An arrangement according to claim 1, **characterized** in that the feeding funnel (7) is arranged in the immediate vicinity of the reaction shaft of the smelting reactor (2).

3. An arrangement according to claim 1 or 2, **characterized** in that the feeding funnel (7) is made of two parts, a top part (9) and a bottom part (10), so that the angle of inclination of the top part with respect to the horizontal level is larger than that of the bottom part.

4. An arrangement according to claim 3, **characterized** in that the angle A between the top part (8) and the bottom part (10) of the feeding funnel (7) is essentially 10 – 30 degrees.

5. An arrangement according to claim 1 or 2, **characterized** in that the feeding funnel (7) is provided with a trajectory-shifting element in order to alter the trajectory of the anode.

6. An arrangement according to claim 3, 4 or 5, **characterized** in that the distance between the bottom part (10) of the feeding funnel (7) and the surface of the melt (8) contained in the reactor is advantageously 0.8 – 1.3 meters.

7. An arrangement according to claim 1, **characterized** in that the bending element (5) for bending the anode consists of four rolling rollers (6) that are located above the feeding funnel (7).

8. An arrangement according to claim 7, **characterized** in that the diameter of the rolling roller (6) is 100 – 500 millimeters.

9. An arrangement according to claim 1, 7 or 8, **characterized** in that the radius of curvature of an anode bent in the bending element (5) is essentially 1,000 – 3,000 millimeters.

10. An arrangement according to any of the preceding claims, **characterized** in that the anodes (4) are arranged to drop into the smelting reactor (2) one by one.

11. An arrangement according to claim 1, 2, 3, 4, 5, 6, 7, 8 or 9, **characterized** in that the anodes (4) are arranged to drop into the smelting reactor (2) in batches of several anodes.

12. An arrangement according to any of the preceding claims, **characterized** in that the anode (4) is arranged to drop into the smelting reactor (2) so that the anode grip brackets, i.e. lugs (15) are pointed upwards.

13. An arrangement according to any of the preceding claims, **characterized** in that in connection with the feeding funnel (7), there are provided at least two shutter elements (12, 14) for preventing the furnace atmosphere from leaking to the surroundings.

14. An arrangement according to any of the preceding claims, **characterized** in that the feeding funnel (7) is provided with elements for guiding the sliding direction of the anode (4).

15. A method for feeding an anode into a metallurgical smelting reactor (2), such as a flash converter, so that at least one anode (4) is fed at a time through a feeding funnel (7) made of at least one part into the smelting reactor, which anode is also bent by means of a bending element (4), **characterized** in that the anode (4) is bent essentially completely, and that it meets the surface of the melt (8) contained in the smelting reactor at an essentially horizontal position.

16. A method according to claim 15, **characterized** in that the bending element (5) is made of four rolling rollers (6) with a diameter of 100 – 500 millimeters.

17. A method according to claim 15 or 16, **characterized** in that in the bending element (5), the anode is bent so that the obtained radius of curvature for the anode is essentially 1,000-3,000 millimeters.

18. A method according to claim 15, 16 or 17, **characterized** in that the anodes (4) are dropped into the smelting reactor (2) one by one.

19. A method according to claim 15, 16 or 17, **characterized** in that the anodes (4) are dropped into the smelting reactor (2) in batches of several anodes.

20. A method according to claim 15, 16, 17, 18 or 19, **characterized** in that the anode (4) drops into the smelting reactor (2) so that the anode grip brackets, i.e. lugs (15) are pointed upwards.